Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

1. (Currently Amended) A method for depositing fluid droplets on a surface, the method comprising: ~~the steps of~~

~~a.~~ establishing a ~~substantially collinear~~ flow of air in a first direction substantially collinear with a trajectory of fluid droplets emitted by each of one or more droplet emitters, the ~~substantially collinear~~ flow of air having a velocity profile characterized by a maximum airflow velocity; and

~~b.~~ emitting at least one fluid droplet from each of the droplet emitters into a first region of the ~~collinear~~ flow of air which is spaced apart from a location of the maximum airflow velocity in a direction transverse to the first direction, ~~said~~ the first region having a first regional airflow velocity lower than the maximum airflow velocity ~~of air within the collinear flow of air~~.

2. (Currently Amended) A method according to claim 1, comprising ~~the additional step of ensuring that the~~ substantially matching a velocity at which the at least one ~~inkjet~~ fluid droplet is emitted into the first region ~~of the collinear flow of air and~~ with the first regional airflow velocity ~~of the region of the collinear flow of air are substantially matched~~.

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) A method for depositing fluid droplets on a surface, the method comprising: ~~the steps of~~

~~a.~~ establishing a ~~substantially collinear~~ flow of air substantially collinear with a trajectory of fluid droplets emitted by a plurality of groups of nozzles; and

~~b.~~ emitting the fluid droplets from ~~a~~ the plurality of groups of nozzles into a plurality of regions of the ~~collinear~~ flow of air, the plurality of regions each having a regional airflow velocity lower than ~~the~~ a maximum airflow velocity ~~of air within~~ of the ~~collinear~~ flow of air ~~, every member of~~ and the plurality of regions ~~of the collinear flow of air~~ each having a different regional airflow velocity.

6. (Currently Amended) The method of claim 5, comprising ~~the additional step of ensuring that the~~ , for each of the plurality of regions, substantially matching a velocity at which the ~~at least one inkjet fluid droplet is~~ fluid droplets are emitted into the region ~~of the collinear flow of air and~~ with the regional airflow velocity of the region ~~of the collinear flow of air are substantially matched~~.

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) An apparatus for depositing fluid droplets on a surface, the apparatus comprising:

~~a.~~ ~~a collinear~~ an airflow duct;

means for establishing in the airflow duct a collinear airflow in a first direction, the collinear airflow ~~duct adapted to provide~~ comprising:

(a) an airflow velocity profile ~~within the collinear airflow, the airflow velocity profile having i.~~ with a maximum airflow velocity; and

~~ii.~~ (b) a first region ~~having~~ transversely spaced apart from a location of the maximum regional airflow velocity in a direction transverse to the first direction, wherein the collinear airflow has a first regional airflow velocity in the first region, ~~the regional airflow velocity being~~ which is lower than the maximum airflow velocity; and

~~b.~~ ~~inkjet nozzles~~ at least one nozzle disposed to emit fluid droplets into the first region ~~of regional airflow velocity at an inkjet fluid droplet velocity~~ in the first direction.

10. (Currently Amended) The apparatus of claim 9, ~~further~~ comprising a systems controller ~~, the systems controller~~

~~capable of ensuring that the inkjet~~ configured to at least substantially match a fluid droplet velocity of the emitted fluid droplets and the first regional airflow velocity ~~are substantially matched~~.

11. (Original) An apparatus for depositing fluid droplets on a surface, the apparatus comprising

a. a collinear airflow duct for establishing a collinear airflow, the collinear airflow duct adapted to provide an airflow velocity profile within the collinear airflow, the airflow velocity profile having

i. a maximum airflow velocity and

ii. a plurality of regions of regional airflow velocity, the regional airflow velocity being

1. lower than the maximum airflow velocity and

2. different in all the regions of regional airflow velocity and

b. a plurality of groups of inkjet nozzles disposed to emit fluid droplets into the regions of regional airflow velocity, each group of inkjet nozzles within the plurality of groups of inkjet nozzles capable of emitting fluid droplets into a different region of regional airflow velocity at an inkjet fluid droplet velocity.

12. (Original) The apparatus of claim 11 further comprising one or more systems controllers, the one or more systems controllers being capable of ensuring that the inkjet fluid droplet velocity provided by a member group of the plurality of groups of inkjet nozzles and the regional airflow velocity of one of the member regions of the plurality of regions of regional airflow velocity within the collinear airflow are substantially matched.

13. (Original) An apparatus for depositing fluid droplets on a surface, the apparatus comprising

a. a collinear airflow duct for establishing a collinear airflow, the collinear airflow duct adapted to provide an airflow velocity profile within the collinear airflow, the airflow velocity profile having
   i. a maximum airflow velocity and
   ii. a plurality of regions of regional airflow velocity, the regional airflow velocity being
      1. lower than the maximum airflow velocity and
      2. different in all the regions of regional airflow velocity and

b. a plurality of rows of inkjet nozzles arranged to emit fluid droplets into the plurality of regions of regional airflow velocity, each row of inkjet nozzles within the plurality of rows of inkjet nozzles capable of emitting fluid droplets into a different region of regional airflow velocity at an inkjet fluid droplet velocity.

14. (Original) The apparatus of claim 13 further comprising one or more systems controllers, the one or more systems controllers being capable of ensuring that the inkjet fluid droplet velocity provided by a member row of the plurality of rows of inkjet nozzles and the regional airflow velocity of one of the member regions of the plurality of regions of regional airflow velocity within the collinear airflow are substantially matched.

15. (New) A method according to claim 1 wherein emitting at least one fluid droplet from each of the droplet emitters into the first region comprises emitting fluid droplets from a plurality of nozzles into the first region.

16. (New) A method according to claim 1 wherein emitting at least one fluid droplet from each of the droplet emitters into the first region comprises emitting the at least one fluid droplet from a first nozzle into the first region and wherein the method comprises emitting at least one additional fluid droplet from a second nozzle into a second region of the flow of air, the second region having a second regional airflow velocity lower than the maximum airflow velocity.

17. (New) A method according to claim 16 wherein at least a portion of the first region and at least a portion of the second region are on opposed sides of the location of the maximum airflow velocity.

18. (New) A method according to claim 17 wherein the first and second regions are symmetrically disposed with respect to the location of the maximum airflow velocity.

19. (New) A method according to claim 17 wherein the first and second regional airflow velocities are equal to one another.

20. (New) A method according to claim 16 wherein the first and second regional airflow velocities are different from one another.

21. (New) A method according to claim 17 comprising substantially matching a velocity at which the at least one fluid droplet is emitted into the first region with the first regional airflow velocity and substantially matching a velocity at which the at least one additional fluid droplet is emitted into the second region with the second regional airflow velocity.

22. (New) A method according to claim 1 wherein emitting at least one fluid droplet from each of the droplet emitters into the first region comprises emitting the at least one fluid droplet from at least one first row of a plurality of rows of nozzles into the first region and wherein the method comprises emitting at least one additional fluid droplet from at least one second row of the plurality of rows of nozzles into a second region of the flow of air, the second region having a second regional airflow velocity lower than the maximum airflow velocity.

23. (New) A method according to claim 22 wherein at least a portion of the first region and at least a portion of the second region are on opposed sides of the location of the maximum airflow velocity.

24. (New) A method according to claim 23 wherein the first and second regions are symmetrically disposed with respect to the location of the maximum airflow velocity.

25. (New) A method according to claim 23 wherein the first and second regional airflow velocities are equal to one another.

26. (New) A method according to claim 22 wherein the first and second regional airflow velocities are different from one another.

27. (New) A method according to claim 23 comprising substantially matching a velocity at which the at least one fluid droplet is emitted into the first region with the first regional airflow velocity and substantially matching a velocity at which the at least one additional fluid droplet is emitted into the second region with the second regional airflow velocity.

28. (New) A method according to claim 1 wherein establishing the flow of air comprises forcing air past at least one surface and wherein the first region is between the at least one surface and the location of the maximum airflow velocity.

29. (New) A method according to claim 1 wherein the flow of air is established in a duct which is substantially round in cross-section.

30. (New) A method according to claim 1 wherein the flow of air is established between a pair of opposed surfaces that converge as they extend in a direction of the flow of air.

31. (New) A method according to claim 1 wherein the flow of air has a first velocity gradient in the first region.

32. (New) A method according to claim 16 wherein the flow of air has a first velocity gradient in the first region and a second velocity gradient in the second region.

33. (New) Apparatus according to claim 9 wherein the collinear airflow comprises a second region wherein the collinear airflow has a second regional airflow velocity which is lower that the maximum airflow velocity and wherein the apparatus comprises a first group of one or more nozzles disposed to emit fluid droplets into the first region in the first direction and a second group of one or more nozzles disposed to emit fluid droplets into the second region in the first direction.

34. (New) Apparatus according to claim 33 wherein at least a portion of the first region and at least a portion of the second region are located on opposed sides of the location of the maximum regional airflow velocity.

35. (New) Apparatus according to claim 34 wherein the first and second regions are symmetrically disposed with respect to the location of the maximum regional airflow velocity.

36. (New) Apparatus according to claim 34 wherein the first and second regional airflow velocities are substantially equal to one another.

37. (New) Apparatus according to claim 33 wherein the first and second regional airflow velocities are different from one another.

38. (New) Apparatus according to claim 34, comprising one or more systems controllers, the one or more systems controllers configured to respectively match a fluid droplet velocity of the fluid droplets emitted by the first and second groups of nozzles with the first and second regional airflow velocities.

39. (New) Apparatus according to claim 9 wherein the collinear airflow comprises a second region wherein the collinear airflow has a second regional airflow velocity which is lower that the maximum airflow velocity and wherein the apparatus comprises a first row of nozzles arranged to emit fluid droplets into the first region in the first direction and a second row of nozzles arranged to emit fluid droplets into the second region in the first direction.

40. (New) Apparatus according to claim 39 wherein at least a portion of the first region and at least a portion of the second region are located on opposed sides of the location of the maximum airflow velocity.

41. (New) Apparatus according to claim 40 wherein the first and second regions are symmetrically disposed with respect to the location of the maximum airflow velocity.

42. (New) Apparatus according to claim 40 wherein the first and second regional airflow velocities are substantially equal to one another.

43. (New) Apparatus according to claim 39 wherein the first and second regional airflow velocities are different from one another.

44. (New) Apparatus according to claim 40, comprising one or more systems controllers, the one or more systems controllers configured to respectively match the fluid droplet velocity of the fluid droplets emitted by the first and second rows of nozzles with the first and second regional airflow velocities.

45. (New) Apparatus according to claim 9 wherein the airflow duct comprises a substantially round cross section.

46. (New) Apparatus according to claim 9 wherein the airflow duct comprises a pair of opposed surfaces which converge as they extend in a direction of the airflow.